



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION OF:

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SERIAL NO. 09/641,933

FILED: AUGUST 18, 2000

FOR: SUB-ATMOSPHERIC GAS

DELIVERY METHOD AND APPARATUS

GROUP ART UNIT: 3753

EXAMINER: G. WALTON

CERTIFICATE OF MALLIN

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on this date:

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

Applicants submit herewith a copy of each of the following thirty-six (36) references cited for consideration in connection with the above application.

	U.S. Patent No.	Inventor(s)	Issue Date
T	2,502,588	Preston et al.	04/1950
	2,608,971	Holmes	09/1952
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•	4,917,136	Ohmi et al.	04/1990
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•	5,341,968	Vandonick	08/1994
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J	5,601,107	Moore et al.	02/1997
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Publication	Author	Publication Date
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"Design and Operation of UHP Low Vapor Pressure and Reactive Gas Delivery Systems", Semiconductor International, pp. 138-143	Fine et al.	October, 1995
"Safe Usage of C1F3: Supply, vacuum service, and exhaust gas management", Solid State Technology, Vol. 40, Issue 9,	Pierce et al.	September, 1997

Applicants also submit herewith a copy of each of the following one hundred and ten (110) references cited for consideration in connection with the above application. These references are the results of a search done by a third-party search firm.

U.S. Patent No.	Inventor(s)	<u>Issue Date</u>
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2,322,468	Redrup	06/1943
2,499,527	Raymond	03/1950
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2,517,534	Courtot	08/1950
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	4,120,480	Ando et al.	10/1978
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4,844,111	Pritchard et al.	07/1989
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5,056,759	Schlesch	10/1991
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61-266884	Japan .	11/1986

The search firm provided the following comments regarding the above one hundred and ten (110) references:

- U.S. Patent No. 2,091,051 shows a balanced valve comprising a diaphragm D, and bellows 60, inlet port 10, outlet port 11. See Figures 1-2, page 1, column 2, lines 12-50.
- U.S. Patent No. 2,517,534 shows a pressure regulator including a diaphragm D. See Figures 1-3, column 1, lines 35-55, column 2, lines 1-51.
- U.S. Patent No. 2,645,884 shows a pressure regulating valve comprising flexible bellows 13, sealing disk 40. See Figures 1-4, column 3, lines 57-75, column 4, lines 1-75, column 5, lines 1-18.
- U.S. Patent No. 3,212,525 shows valves for refrigeration apparatus having cooling and/or heating cycles, including bellows 25, and capillary tube 27. See Figures 1-6.
- U.S. Patent No. 3,245,583 shows a gas container 20, having a protecting tube 30, wherein the intake end 36 of the tube 30 is placed within a central part of the high pressure gas container. See Figure 1, column 2, lines 46-66.
- U.S. Patent No. 4,335,742 shows an evaporator pressure regulator including capillary tube 92, bellow assembly 72. See Figures 1, 2, and 5.

The remaining references are of general interest for showing different fail safe and valve arrangements.

Additionally, Applicants submit herewith a copy of each of the following forty-one (41) references cited for consideration in connection with the above application. These references are also the results of a search done by a third-party search firm.

U.S. Patent No.	Inventor(s)	Issue Date
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788,352	Crawford	04/1905
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U.S. Patent No.	Inventor(s)	Issue Date
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2,237,052	Gill	04/1941
2,357,777	White	09/1944
2,750,071	Ritchie	06/1956
3,650,290	Moen et al.	03/1972
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5,271,232	Ogawa et al.	12/1993
5,357,758	Andonian	10/1994
5,438,837	Caldwell et al.	08/1995
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5,456,281	Teay	10/1995
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5,761,910	Tom	06/1998
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5,916,245	Tom	06/1999
5,935,305	Tom et al.	08/1999
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2 045 414 WO 94/17334	United Kingdom PCT	10/1980 08/1994
0 470 009	Europe	02/1995

The search firm provided the following comments regarding the above forty-one (41) references:

- U.S. Patent Number 5,544,785 shows a reservoir of gaseous fuel in liquid phase comprising a draw off orifice (6), valve (7) and a pressure reducer or evaporator (8). See Figure 1, Col. 2, lines 60-67, Col. 3, lines 1-30.
- U.S. Patent Number 2,237,052 shows a dispensing and mixing apparatus for liquefied gas comprising filler valve (34), vapor outlet valve (36) and pressure regulator (30). See Figure 1, Col. 2, lines 1-30.

The remaining references are of general interest for showing different fluid storage and dispensing systems.

All of the above references are listed on the enclosed Form PTO-1449 (6 pages) entitled "Information Disclosure Citation."

This Supplemental Information Disclosure Statement is being submitted before the receipt of a Final Action under §1.113 or a Notice of Allowance under §1.311, and is accompanied by an authorization to charge the fee set forth in §1.17(p), currently \$180.00.

Please charge any and all fees incurred in connection with this submission to Deposit Account No. 13-0017 in the name of McAndrews, Held & Malloy, Ltd.

Respectfully submitted,

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